

## REMARKS

The present application includes pending claims 21-26, 28 and 29. Claims 21-26 stand rejected. Claim 29 has been allowed, while claim 28 is objected to as being dependent upon a rejected base claim.

Claims 21-23 stand rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6,411,287 ("Scharff"). Claims 24-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Scharff in view of United States Patent No. 6,492,978 ("Selig"). The Applicants respectfully traverse these rejections for at least the reasons previously discussed during prosecution and the following:

### **I. Scharff Alone Or In Combination With Selig Does Not Render Claims 21-26 Unpatentable**

In order for a *prima facie* case of obviousness to be established, the Manual of Patent Examining Procedure (MPEP) states the following:

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the teaching. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) **must teach or suggest all the claim limitations**. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must **both be found in the prior art, and not based on applicant's disclosure**.

Manual of Patent Examining Procedure MPEP at § 2142, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added). Additionally, if a *prima facie* case of obviousness is not established, the Applicants are under no obligation to submit evidence of nonobviousness.

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See Manual of Patent Examining Procedure MPEP at § 2142.

Claim 21 recites, in part, “an acoustic wave absorbing material **disposed between** the deformable dome and the touch sensitive surface,” of an acoustic wave switch “such that in response to a force acting on the dome, the dome deforms and contacts the absorbing material and the absorbing material contacts the touch sensitive surface of the acoustic wave switch with sufficient pressure to actuate the acoustic wave switch.” Claim 24 recites, in part, an “acoustic wave absorbing material being spaced from the touch sensitive surface of the acoustic wave switch when the actuator is in an unactuated position and the acoustic wave absorbing material contacting the touch sensitive surface of the switch actuating the acoustic wave switch in response to a force acting on the actuator to move the acoustic wave absorbing material into actuating contact with the touch sensitive surface of the acoustic wave switch.”

**A. Scharff Teaches Away From An Intervening Acoustic Wave Absorbing Material**

Scharff relates “to a sealing system for use with acoustic wave touchscreens.” See Scharff at column 1, lines 5-7. In particular, Scharff discloses various methods of securing a seal over a touchscreen. Scharff does not describe, teach or suggest, however, “an acoustic wave absorbing material disposed between” a seal and a touch screen. Further, Scharff does not describe, teach or suggest an “acoustic wave absorbing material being spaced from” a touch screen and which “contact[s]” the touch screen “in response to a force acting on [an] actuator to move the acoustic wave absorbing material into actuating contact with the touch sensitive surface of the acoustic wave switch.”

While Scharff discloses stretched seals over touch screens, Scharff clearly does not describe, teach or suggest an acoustic wave absorbing material” **between the touch screen and the seal**, in which the acoustic wave absorbing material is configured to contact the touch screen when an actuation force is applied. Indeed, Scharff specifically teaches away from such an intervening acoustic wave absorbing material, as shown below.

It is understood that even if the components of the acoustic touchscreen system, e.g., transducers, reflective arrays, etc., are mounted directly to display surface 210 in a configuration similar to that shown in FIG. 2 (commonly referred to as a direct-on-tube acoustic touchscreen system), the **acoustic absorption of the sealing member must still be minimized.**

**Although the acoustic absorption of the sealing member must be minimized**, as noted in the example configuration shown in FIG. 5, often this design goal is in direct conflict with the goal of maximizing sealing performance.

*Id.* at column 5, lines 44-56 (emphasis added). Scharff is clear – the acoustic absorption of the sealing member **must** be minimized. As such, Scharff specifically teaches away from positioning an acoustic wave absorbing material **between** the seal and the touchscreen. Scharff simply does not describe, show, teach or suggest any example in which such a material is positioned **between** the seal and the touchscreen, and certainly does not describe a separate and distinct acoustic wave absorbing material under a seal, in which the material is configured to contact the touch surface.

**B. The Office Action Does Not Establish A *Prima Facie* Case Of Obviousness**

The Office Action cites Scharff at column 4, lines 1-4 and reference numeral 703 as disclosing an acoustic wave absorbing material disposed between a deformable dome and a touch sensitive surface. *See* December 5, 2007 Office Action at pages 2-3 and September 14, 2007 Office Action at page 2. However, the cited portion of Scharff states the following:

Touchscreen 100 includes a surface 101 suitable for propagating surface acoustic waves, e.g., Rayleigh waves, Love waves, and other waves sensitive to a touch on the surface.

*Id.* at column 4, lines 1-4. Further, **reference numeral 703 relates to “tension straps” that are “coupled to the CRT.”** *See id.* at column 6, lines 30-31. Neither of these portions, which the Office Action relies on, describes, teaches or suggests, however, “an acoustic wave absorbing material **disposed between** the deformable dome and the touch sensitive surface,”

as recited in claim 21, or an “acoustic wave absorbing material being spaced from the touch sensitive surface of the acoustic wave switch when the actuator is in an unactuated position and the acoustic wave absorbing material contacting the touch sensitive surface of the switch actuating the acoustic wave switch in response to a force acting on the actuator to move the acoustic wave absorbing material into actuating contact with the touch sensitive surface of the acoustic wave switch,” as recited in claim 24. Thus, for at least these reasons, the Office Action has not established a *prima facie* case of obviousness with respect to the pending claims.

Additionally, the Office Action responds to the Applicants as follows:

Scharff et al. discloses an acoustic wave absorbing material disposed between the dome and touch sensitive surface (corresponds to touch screen 100 includes a surface 101 suitable for propagating surface acoustic wave, e.g., Rayleigh waves, Love waves, and other waves sensitive to a touch on the surface, **it is clear that the absorbing material is Rayleigh waves or other waves**, see col. 4, lines 1-4, and the dome is frame 703....

See December 5, 2007 Office Action at page 6 (emphasis added). Thus, the Office Action contends that (1) the absorbing **material** is a “wave,” (2) column 4, lines 1-4 of Scharff describes the relevant limitations, and (3) “the dome is frame 703.” To the extent not addressed above, the Applicants will address each of these assertions in turn.

**1. A Rayleigh Wave Is Not A “Material” That “Absorbs Itself”**

As noted above, the Office Action contends that “the absorbing material is Rayleigh waves or other waves.” See *id.* The Applicants respectfully submit that a surface acoustic wave, such as a Rayleigh wave, is by no means a “**material**.” Instead, it is a propagated wave. The wave does not absorb itself. Claim 21, for example, recites “an acoustic wave absorbing material.” An acoustic wave is not a **material**, nor is it even capable of “absorbing” itself. Thus, for at least this reason, the Applicants respectfully request reconsideration of the claim rejection. If, however, the present rejection is maintained, the

Applicants respectfully request a citation to some authority that indicates that an acoustic wave is a **material** that absorbs itself.

Indeed, the statement “**it is clear that the absorbing material is Rayleigh waves or other waves,**” because of the manner in which its worded, could be interpreted as the Examiner asserting Official Notice of the subject of that statement (i.e., that a Rayleigh wave or other wave is an acoustic wave absorbing material). If the Examiner is asserting Official Notice that the subject of the statement is common knowledge, the Applicants respectfully traverse the Examiner’s assertion as further set forth below. Alternatively, if the Examiner’s assertion is based on the personal knowledge of the Examiner, then under MPEP § 2144.03(C) and 37 C.F.R. § 1.104(d)(2), the Examiner’s assertion must be supported by an affidavit from the Examiner.

According to MPEP § 2144.03(A), Official Notice, without supporting references, should only be asserted when the subjects asserted to be common knowledge are “capable of instant and unquestionable demonstration as being well-known.” That is, the subjects asserted must be of “notorious character” under MPEP § 2144.03(A).

However, the Applicants respectfully submit that the subject matter of the perceived assertion of Official Notice is not well-known in the art as evidenced by the searched and cited prior art. The Applicants respectfully submit that the Examiner has performed “a thorough search of the prior art,” as part of the Examiner’s obligation in examining the present application under MPEP § 904.02.

Additionally, the Applicants respectfully submit that the Examiner’s searched and cited references found during the Examiner’s thorough and detailed search of the prior art are indicative of the knowledge commonly held in the art. However, in the Examiner’s thorough and detailed search of the relevant prior art, none of the prior art taught or suggested the subject matter of the perceived assertion of Official Notice. That is, the Examiner’s thorough and detailed search of the prior art has failed to yield any mention of the teachings (i.e., that a Rayleigh wave or other such wave is an acoustic wave absorbing **material**) that the

Examiner suggests is widely known in the art. The Applicants respectfully submit that if the subject matter of the perceived assertion of Official Notice had been of “notorious character” and “capable of instant and unquestionable demonstration as being well-known” under MPEP § 2144.03(A), then the subject matter would have appeared to the Examiner during the Examiner’s thorough and detailed search of the prior art.

If the Examiner had found any teaching of relevant subject matter, the Examiner would have been obligated to list the references teaching the relevant subject matter and make a rejection. Consequently, the Applicants respectfully submit that the prior art does not teach the subject matter of the perceived assertion of Official Notice and respectfully traverse the perceived assertion.

The Applicants specifically challenge the Examiner’s perceived assertion of Official Notice with regard to a Rayleigh wave or other such wave being an acoustic wave absorbing **material**. As stated above, the Applicants respectfully traverse the Examiner’s perceived assertion of Official Notice and submit that the subject matter is not of such “notorious character” that it is “capable of instant and unquestionable demonstration as being well-known.” Under MPEP 2144.03, the Examiner is now obligated to provide a reference(s) in support of the perceived assertion of Official Notice if the Examiner intends to maintain any rejection based thereon. Additionally, the Applicants respectfully request the Examiner reconsider the perceived assertion of Official Notice and provide to the Applicants any basis for the perceived assertion of Official Notice.

**2. The Portions Of Scharff Relied On By The Office Action Do Not Describe, Teach Or Suggest The Relevant Limitations**

Next, the Office Action continues to rely on Scharff at column 4, lines 1-4. As discussed above, however, there is nothing in this portion (or the remainder) of Scharff that describes, teaches or suggests “an acoustic wave absorbing material disposed between the deformable dome and the touch sensitive surface,” as recited in claim 21, or an “acoustic wave absorbing material being spaced from the touch sensitive surface of the acoustic wave

switch when the actuator is in an unactuated position and the acoustic wave absorbing material contacting the touch sensitive surface of the switch actuating the acoustic wave switch in response to a force acting on the actuator to move the acoustic wave absorbing material into actuating contact with the touch sensitive surface of the acoustic wave switch,” as recited in claim 24. Thus, for at least this reason, the Applicants respectfully request reconsideration of the claim rejection.

Further, with respect to reference numeral 703 being a “dome,” the Applicants reiterate that reference numeral 703 relates to “tension straps” that are “coupled to the CRT.” *See id.* at column 6, lines 30-31 (“FIG. 7 illustrates a CRT 701 with a plurality of **tension straps 703** coupled to the CRT via CRT mounting tabs 705.”). A strap, in general, or a tension strap, in particular, **is by no means a dome**. Thus, for at least this reason, the Applicants respectfully request reconsideration of the claim rejections.

The Office Action also asserts the following:

The acoustic absorption of the sealing member even be minimized, but he still does teach that the acoustic absorption material disposed between the dome (frame) and touch surface (see col. 6, 61-65).

*See* December 5, 2007 Office Action at page 7. As shown above, the Office Action relies on Scharff at column 6, lines 61-65 as disclosing the relevant limitations. This portion of Scharff states, however, the following:

Third, an extremely small and uniform **gap** can be maintained between the seal housing and the touch surface, e.g., less than 1 millimeter, thus allowing the designer to select from a wider range of sealing materials that still meet the acoustic signal absorption requirements of the system.

*See* Scharff at column 6, lines 61-65 (emphasis added). As shown above, this portion of Scharff notes that the “gap” may be small and uniform. Because of this, the “seal housing” may be selected from a wider range of materials. While Scharff discloses a “seal housing” and a touch surface separated by a gap, Scharff does not describe that there is anything

disposed between those two components. In short, none of the cited portions of Scharff relied on in the Office Action, nor anything else in Scharff describes an “acoustic wave absorbing **material**” within the gap between the seal housing and the touch surface. Again, there is nothing in Scharff that describes, teaches or suggests “an acoustic wave absorbing material **disposed between** the deformable dome and the touch sensitive surface,” as recited in claim 21, or an “acoustic wave absorbing material being spaced from the touch sensitive surface of the acoustic wave switch when the actuator is in an unactuated position and the acoustic wave absorbing material contacting the touch sensitive surface of the switch actuating the acoustic wave switch in response to a force acting on the actuator to move the acoustic wave absorbing material into actuating contact with the touch sensitive surface of the acoustic wave switch,” as recited in claim 24. Thus, the Applicants respectfully request that the claim rejections be reconsidered and withdrawn.

Scharff does not describe, teach or suggest “an acoustic wave absorbing material **disposed between** the deformable dome and the touch sensitive surface,” of an acoustic wave switch “such that in response to a force acting on the dome, the dome deforms and contacts the absorbing material and the absorbing material contacts the touch sensitive surface of the acoustic wave switch with sufficient pressure to actuate the acoustic wave switch,” as recited in claim 21. Thus, the Applicants respectfully submit that claims 21-23 should be in condition for allowance.

Additionally, the proposed combination of Scharff and Selig does not describe, teach or suggest an “acoustic wave absorbing material being spaced from the touch sensitive surface of the acoustic wave switch when the actuator is in an unactuated position and the acoustic wave absorbing material contacting the touch sensitive surface of the switch actuating the acoustic wave switch in response to a force acting on the actuator to move the acoustic wave absorbing material into actuating contact with the touch sensitive surface of the acoustic wave switch,” as recited in claim 24. Thus, claims 21-26 and 28 should all be in condition for allowance.



## II. Conclusion

In general, the Office Action makes various statements regarding the pending claims and the cited references that are now moot in light of the above. Thus, the Applicants will not address such statements at the present time. The Applicants expressly reserve the right, however, to challenge such statements in the future should the need arise (*e.g.*, if such statements should become relevant by appearing in a rejection of any current or future claim).

The Applicants respectfully submit that the Office Action has not established a *prima facie* case of obviousness with respect to any of the pending claims. Indeed, the Applicants respectfully submit that the pending claims of the present application define patentable subject matter, and request reconsideration of the objections and rejections. If the Examiner has any questions or the Applicants can be of any assistance, the Examiner is invited to contact the undersigned attorney for the Applicants.

No fee is believed due with respect to this Paper. The Commissioner is authorized, however, to charge any necessary fees, or credit any overpayment to Account No. 13-0017.

Respectfully submitted,

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